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| 2292 7590 03/05/2009<br>BIRCH STEWART KOLASCH & BIRCH<br>PO BOX 747<br>FALLS CHURCH, VA 22040-0747 |             |                             |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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mailroom@bskb.com

# Office Action Summary

**Application No.**

10/607,057

**Applicant(s)**

DE GRAAFF ET AL.

**Examiner**

JACKY X. ZHENG

**Art Unit**

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on January 14, 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on June 27, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This office action is in response to applicant's amendments and remarks filed on January 14, 2009.
2. **Claims 1-6 and 17-18** have been amended.
3. **Claims 1-18** are currently pending.

### *Response to Arguments*

4. Applicant's arguments filed on January 14, 2009 have been fully and carefully considered but are respectfully found to be not persuasive for at least the following reason(s).

5. In regard to Applicant's remarks on pg. 7, fourth paragraph, regarding the rejection made under 35 U.S.C. §112, second paragraph with regard to independent claims 1, 6, 17 and as well as the corresponding dependent claims, Applicant asserts that *"...the term 'directly' is a commonly used patent claim term, and that one skilled in the art would understand the term to mean 'without any intervening step or process'...thus one skill in the art would know that the terms directed to extracting data encoding the preview image directly from the stream of data would preclude extracting data encoding the preview image indirectly from the stream of data (e.g. from a file received from a stream and then stored)..."*. Applicant's argument(s) are fully considered, however found to be not persuasive for at least the following reasons.

- a. First, without acquiesces to Applicant's remarks with regard to whether or not the term "directly" being a commonly used patent claim term, Examiner respectfully submits that statistics on frequent usages of a term is rather irrelevant in determining the definiteness of a claim limitation. Further, as previously indicated in previously-mailed Office Action that such a limitation is considered as a *relative* limitation, and without any

sufficient descriptions further depicting such a relative limitation, and the specification does not provide a standard for ascertaining the requisite degree (for instance, one of ordinary skill in the art would consider a process to be "directly" carried out when it has been reduced from originally ten steps to just five steps; whereas others might only consider it to be "directly" when it is been reduced from ten steps to merely one step, thus it is rather relative than explicit), and therefore the scope of such a relative limitation is incapable to be *distinctly* and *explicitly* determined, in turns render the limitation indefinite.

b. Second, as alleged by Applicant that "directly" *should* be defined as "without any intervening step or process". In response, Examiner respectfully submits, if such a specific limitation is intended to be claimed, and/or the specific description of "without any intervening step or process" is intended to be used as an explicit definition of the term "directly", such specific definition requires to be amended into the claim languages in order for consideration. Therefore, Examiner respectfully submits that until such a relative limitation to be further described with an explicit definition, such a limitation must subjected to broadest reasonable interpretation.

Therefore, for at least the reasons set forth above, the rejections made under 35 U.S.C. §112, second paragraph with regard to claims the independent claims 1, 6, 17 and the corresponding dependent claims are remained proper and therefore maintained as of the record.

6. In regard to Applicant's remarks from pg. 7, fifth paragraph to pg. 9, forth paragraph, regarding the rejection made under 35 U.S.C. §103(a) over Searby and Liu et al., with regard to

Claims 1-2, 6-10, 15 and 17, Applicant asserts that no “*rational reason for combining the teachings of Liu et al. and Searby*”. Applicant’s argument(s) are fully considered, however found to be not persuasive for at least the following reasons.

- a. First, Searby discloses an invention relates to an electronic image processing system for modifying initial image to produce data representing a modified image, which is in the field of image (i.e. thumbnail images) processing. Liu et al., discloses an invention relates to, but not limited to, for transforming an image created by a digital still camera and etc., which is also in the field of image (i.e. thumbnail images) processing. Therefore, both of prior arts of record are at least the analogous arts if not also in the same filed of endeavor(s).
- b. Second, as previously discussed in the office action mailed on July 15, 2008, from fourth paragraph of pg. 4 to first paragraph of pg. 5, indicated,

“Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby by the teachings of Liu et al. to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al., thereby obtaining “the thumbnail representation associated with the main image remains unchanged...” (*col. 2, ln 8-9*) and “a system and method for properly transforming a digital image ... such that the transformed metadata accurately reflects transformation made to the main image” (*col. 2, ln 32-37*).”

Therefore, one of ordinary skill in the art at the time of invention would have been able to readily realize the benefits and/or advantages in incorporating the teachings of two references. Thus, for at least the reasons set forth above, the rejections made under 35 U.S.C. § 103(a) over Searby

and Liu et al. with regard to claims 1-2, 6-10, 15 and 17 are remained proper and therefore maintained.

7. In regard to Applicant's remarks on pg. 10, first paragraph regarding the rejection made under 35 U.S.C. §103(a) over Searby and Liu et al., Applicant asserts that Liu et al. (a) "*does not disclose or suggest extracting data encoding the preview image directly from the stream of data ...*"; and (b) "*(in Liu et al.) any data associated with a preview image is first stored and then extracted and processed, whereas in Applicant's claimed invention, the data encoding the preview image is extracted directly (i.e. without a proceeding storing step) from the stream of data*". Applicant's argument(s) are fully considered, however found to be not persuasive for at least the following reasons.

a. With regard to argument (a), in response, Examiner respectfully submits that as admitted by Applicant that "any data associated with a preview image (in Liu et al.)" is "first stored and then extracted and processed" (*first paragraph of pg. 10*), therefore Liu et al. at least disclose extracting of data associated with a preview image and to be processed (also see the details discussed in third paragraph of pg. 4 in previously-mailed office action dated July 15, 2008).

b. With regard to argument (b), in response, Examiner respectfully submits, in accordance with Applicant's statement of, in Liu et al., "*any data associated with a preview image is first stored and then extracted and processed*". Now, turning to currently-presented version of independent claim 1 (for example), specifically recites, inter alia, "*a file storage device configured to store a master file including data from the*

*stream of data, wherein the controller is configured to create a preview image with a lower data size than the scanned image from at least part of the data encoding the scanned image, wherein the controller is further configured to extract data encoding the preview image directly from the stream of data ....*". In accordance with the claim language (in the second 'wherein clause'), "the data encoding the preview image" is clearly being extracted from "the stream of data", and "the stream of data" is clearly being stored prior to "extracting" according to the exact claim limitation(s) "*a file storage device configured to store a master file including data from the stream of data*" (in the first 'wherein clause' prior to the process of "extracting" in the second 'wherein clause'). Therefore, the teachings of Liu et al., as also admitted by Applicant that in Liu et al., any data associated with a preview image is first stored and then extracted and processed, which clearly read on the broad scope of at least the independent claims, first stored and then extract.

c. In continuation of responses to argument (b), Applicant's second part of argument (b), "*whereas in Applicant's claimed invention, the data encoding the preview image is extracted directly (i.e. without a proceeding storing step) from the stream of data*".

First, the alleged argument of "without a proceeding storing step" is not persuasive as it is inconsistent with previously recited claim limitation, which clearly indicates "*a file storage device configured to store a master file including data from the stream of data*", thus "the stream of data" has been stored in "a file storage device" prior to extracting at least according to the claim languages. Second, Applicant's remarks of "without a proceeding storing step", such a description has neither being amended into nor merely-

required by the broad scope of the claim(s). Therefore, as also indicated previously, Applicant's respectfully suggest to add and/or amend such limitation into the claims, and to be consistent with Applicant's invention, in order for consideration of such limitations. Therefore, for at least the reasons set forth above, the rejections made under 35 U.S.C. § 103(a) over Searby and Liu et al. with regard to claims 1-2, 6-10 and 15-17 are remained proper and therefore maintained.

8. In regard to Applicant's remarks in second paragraph of pg. 10 in remarks, regarding the rejection made under 35 U.S.C. § 103(a), Applicant asserts that Liu et al. *"does not disclose or suggest extracting data encoding the preview image written to a thumbnail file in order to create the preview image"*. Applicant's argument(s) are fully considered, however found to be not persuasive for at least the following reasons.

a. Without acquiesces to Applicant's aforementioned argument, the exact claim language recited in independent claim 1, for example, provides *"... and to write the extracted data to a thumbnail file in order to create the preview image"*. Applicant is respectfully suggested for considering MPEP 2111.06 and MPEP2106 II. C. with relating to *statement of intended use or field of use* which indicates "claim scope is not limited by claim language that suggest or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure...", with respect to current claim languages (i.e. *"to write..." rather than "writes"; "in order to create" rather than "creates", etc.*).



b. In continuation of above, as the rejection was made under 103(a) over two prior arts of record, without acquiesces to the argument relating to Liu et al., with respect to the argued limitation of “... and to write the extracted data to a thumbnail file in order to create the preview image”, merely in the primary reference, Scarby, i.e. in “Abstract”, discloses, among others, “*a electronic image processing system, comprises a large capacity store comprising a source area for storing data representing an initial image and a destination area for storing data representing a modified image. A control processor calculates transformation parameters and controls the transfer of portions of the initial image data to a high speed low capacity cache store*”, which readily read on the scope of the argued limitation.

Therefore, as the rejection was based on the combination of the references, and in instant, for at least the primary reference disclose the limitation(s) in argument, the rejection made under 35 U.S.C. §103(a) over Scarby and Liu et al. with regard to claims 1-2, 6-10 and 15-17 are remained proper and therefore maintained.

9. With regard to Applicant's remarks in third paragraph of pg. 10, Applicant asserts that the corresponding dependent claims are allowable because they depend from the independent claims 1, 6, and/or 17. However, since the rejections of claims 1, 6 and 17 are maintained for reasons stated above, the grounds of rejection for the corresponding dependent claims are also maintained since applicant has not pointed to the deficiencies of the rejection.

10. With regard to Applicant's remarks in fourth paragraph of pg. 10, with regard to the typographical errors of the previous office action. Examiner herein submits for the record, on

January 14, 2009, upon a telephonic inquiry made from Mr. Michael E. Monaco (Reg. 52,041), Examiner has already clearly pointed out to Applicant (on January 15, 2009) that, in the claim number in the rejection ground set forth in paragraph 9 of previous office action is clearly typographic errors, and "Claims 1-2 and 6-10 ..." should be "Claims 1-2, 6-10, 15 and 17" as the discussions of claims 15 and 17 are subsequently followed after the rejection ground. In addition, with regard to dependent claim 9, mere general allegation of "*a prima facie case of obviousness has not been presented*" without specifically pointing out how the language of the claims patentably distinguishes them from the references, Applicant's arguments fail to comply with 37 CFR 1.111(b), thus respectfully found to be not persuasive.

(The grounds of rejection and/or objection are maintained for at least the responses set forth above and/or the reasons of record set forth previously; and also herein reproduced and provided with/without further details as in below.)

***Claim Rejections - 35 USC § 112***

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. **Claims 1-18** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. The term "*directly*" in each of claims 1, 6 and 17 is a relative term which renders the claim indefinite. The term "*directly*" is not defined by the claim with any sufficient description depicting such a relative limitation, the specification does not provide a standard for ascertaining

the requisite degree, and therefore the scope of such a relative limitation is unable to be distinctly determined. This issue also affects the corresponding dependent claims 2-5, 7-16 and 18.

Further clarification in the claims is suggested (also see paragraph 5 of "Responses to Arguments" section above).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claims 1-2 and 6-10, 15 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0589724 A2 (as admitted by Applicant in i.e. Para. [004] and [005] of Specification; instant prior art published on March 30, 1994, hereinafter as "Searby") and further in view of Liu et al. (US Patent 7,302,118).

**With regard to claims 1 and 2**, the claim is drawn to an image scanning and processing system. Applicant's admission of prior art of following discussed limitations over Searby are evidenced in Applicant's original disclosure, such as in Para. [004] -[005], discloses: "checking whether the scan resolution is high enough to show all the detail in critical region", "operator be able to select certain regions in the scanned images", and "able to view them at the resolution used to scan the original" are known from EP 0589724 ("Searby"), and further discloses that this publication further disclose the limitations such as "electronic image processing system" with "storing unit", "a viewing store", "a monitor" for displaying, and image data being "down

converted”, then “written to a destination area” performed by “the control processor” (*See Specification of instant Application, i.e. Para. [004] & [005]; also in Searby, i.e. Figure 1 and Claims 1 and 15*) (also see paragraphs 6-8 of “Responses to Arguments” section above for further details).

Searby does not *explicitly* disclose the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data.

However, Liu et al. discloses an invention relates to a system and method for transforming a main image of a digital image, such as one stored in the EXIF (Exchangeable Image File) format, updating the metadata, including the thumbnail image, to correspond to the transformed main image (*see Liu et al., i.e. “Abstract”*). In details, Liu et al. specifically disclose the limitation of extracting thumbnail image, metadata, and etc. from EXIF data stream (*see Liu et al., i.e. Figure 4, Steps 220-222; also Fig. 3 and col. 6, ln 35-64*). More specifically, “a decoder object 212” (*in Fig. 3*) extracts from the EXIF stream 220 a main image, metadata, and thumbnail information, further detecting whether the thumbnail image extracted is in the JPEG compressed format in Step 223 (*in Fig. 4*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby by the teachings of Liu et al. to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al., thereby obtaining “the thumbnail representation associated with the main image remains unchanged...”

(col. 2, ln 8-9) and “a system and method for properly transforming a digital image ... such that the transformed metadata accurately reflects transformation made to the main image” (col. 2, ln 32-37).

With regard to claims 6-7, 8-10 and 17, the claims are drawn to a method of scanning and processing an image and a method of selecting one of a plurality of master file. Applicant's admission of prior art of following discussed limitations over Searby are evidenced in Applicant's original disclosure, such as in Para. [004] -[005], discloses: “checking whether the scan resolution is high enough to show all the detail in critical region”, “operator be able to select certain regions in the scanned images”, and “able to view them at the resolution used to scan the original” are known from EP 0589724 (“Searby”), and further discloses that this publication further disclose the limitations such as “electronic image processing system” with “storing unit”, “a viewing store”, “a monitor” for displaying, and image data being “down converted”, then “written to a destination area” performed by “the control processor” (*See Specification of instant Application, i.e. Para. [004] & [005]; also in Searby, i.e. Figure 1 and Claims 1 and 15*).

Searby does not explicitly disclose the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data.

However, Liu et al., discloses an invention relates to a system and method for transforming a main image of a digital image, such as one stored in the EXIF (Exchangeable Image File) format, updating the metadata, including the thumbnail image, to correspond to the transformed main image (*see Liu et al., i.e. “Abstract”*). In details, Liu et al. specifically disclose the limitation of extracting thumbnail image, metadata, and etc. from EXIF data stream (*see Liu et al., i.e. Figure 4, Steps 220-222; also Fig. 3 and col. 6, ln 35-64*). More specifically, “a

decoder object 212” (*in Fig. 3*) extracts from the EXIF stream 220 a main image, metadata, and thumbnail information, further detecting whether the thumbnail image extracted is in the JPEG compressed format in Step 223 (*in Fig. 4*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified Searby by the teachings of Liu et al. to include the limitation of extracting data encoding the preview image (or thumbnail image) directly from the stream of data taught by Liu et al., thereby obtaining “the thumbnail representation associated with the main image remains unchanged...” (*col. 2, ln 8-9*) and “a system and method for properly transforming a digital image ... such that the transformed metadata accurately reflects transformation made to the main image” (*col. 2, ln 32-37*).

**With regard to claim 15**, the claim is drawn to the method according to claim 6, further comprising: image-processing the stream of data before creation of the preview image (*see Liu et al. i.e. Fig. 5, Step 274, “lossless transformation on main image”*).

16. **Claims 3, 11 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Searby and Liu et al. as applied to claims 1-2, 6-10, 15 and 17 above, and further in view of Patton et al. (U.S. Patent 6,795,209).

**With regard to claim 3**, the claim is drawn to the system according to claim 2, wherein the display unit provides a selection frame with which the user makes the user's selection of the section, the selection frame being resizable and movable.

Scarby and Liu et al. do not *explicitly* disclose the limitations of "selection frame" being "resizable" and "movable".

However, Patton et al. disclose the limitations of having a user interface for making a selection of a interested image, and capable of allowing the selection to be "resizable" and "movable" (*See i.e. Figure 7, and Column 8, lines 38-59*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Scarby and Liu et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have to include the limitations of "selection frame" being "resizable" and "movable" taught by Patton et al. modified the teachings of Scarby and Liu et al. by the teachings of Patton et al. to include the limitations of "selection frame" being "resizable" and "movable" taught by Patton et al. *for allowing the easier accesses of modification of the images for the customers (See "Background of Invention" in Patton et al.)*.

**With regard to claim 18**, the claim is drawn to the system according to claim 1, further comprising an inkjet print device for printing the preview image and/or the scanned image (*See Patton et al., i.e. Figure 3A, Part 44, a digital output device; column 7, lines 29-31, discloses that "the digital output device can also be an inkjet printer such as Hewlett Packard DeskJet 870xi*).

**With regard to claim 11**, the claim is drawn to the method according to claim 8, further comprising: providing a selection frame in the survey view, wherein an operator selects a region of interest by sizing and positioning the selection frame in the survey view.

Scarby and Liu et al. do not *explicitly* disclose the limitations of “selection frame” being “resizable” and “movable”.

However, Patton et al. disclose the limitations of having a user interface for making a selection of a interested image, and capable of allowing the selection to be “resizable” and “movable” (*See i.e. Figure 7, and Column 8, lines 38-59*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Scarby and Liu et al. to include the limitations of “selection frame” being “resizable” and “movable” taught by Patton et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Scarby and Liu et al. by the teachings of Patton et al. to include the limitations of “selection frame” being “resizable” and “movable” taught by Patton et al. *for allowing the easier accesses of modification of the images for the customers (See “Background of Invention” in Patton et al.)*.

17. **Claims 4 and 12-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarby and Liu et al. as applied to claims 1-2, 6-10, 15 and 17 above, and further in view of Zhou (U.S. Pub. 2002/0015447).

**With regard to claim 4**, the claim is drawn to system according to claim 2, wherein the selected section of the preview image is converted to a different data format before being displayed.



Searby and Liu et al. do not *explicitly* disclose the limitations of converting the data format before previewing or being display.

However, Zhou discloses the limitations of converting of data format of the data collected by CCD and converted the data to NTSC format for displaying on the LCD screen (*See Zhou, Paragraph [0040]*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. to include the limitations of converting the data format before previewing or being display taught by Zhou. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. by the teachings of Zhou to include the limitations of converting the data format before previewing or being display taught by Zhou, *for proper previewing the image on LCD or TV (See Zhou, Paragraph [0040])*.

**With regard to claim 12**, the claim is drawn to the method according to claim 10, wherein the part of the scanned image representing the region of interest is converted to a different data format before being displayed.

Searby and Liu et al. do not *explicitly* disclose the limitations of converting the data format before previewing or being display.

However, Zhou discloses the limitations of converting of data format of the data collected by CCD and converted the data to NTSC format for displaying on the LCD screen (*See Zhou, Paragraph [0040]*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. to include the limitations of

converting the data format before previewing or being display taught by Zhou. It would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. by the teachings of Zhou to include the limitations of converting the data format before previewing or being display taught by Zhou, *for proper previewing the image on LCD or TV (See Zhou, Paragraph [0040])*.

**With regard to claim 13**, the claim is drawn to the method according to claim 12, wherein the part of the scanned image representing the region of interest is compressed when converted to the different data format and decompressed before being displayed (*see Liu et al. i.e. Fig. 3 and 4, "decoder object", "encoder object", "convert thumbnail data to JPEG compressed format*).

**With regard to claim 14**, the claim is drawn to the method according to claim 13, wherein the part of the scanned image representing the region of interest is chosen to be larger than a size leading to compression artifacts (*see Application Specification, i.e. Para. [004], admitted prior art, "it may be desirable, for instance to check whether the scan resolution is high enough to show all the details in a critical region ("region of interested" claimed)... thus desired that the operator be able to select certain in the scanned image, and be able to view them at the resolution used to scan the original..."*).

18. **Claims 5 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Searby and Liu et al. as applied to claims 1-2, 6-10, 15 and 17 above, and further in view of Baggs et al. (U.S. Pub. 2003/0231801).

With regard to claims 5 and 16, the claim is drawn to the system and the method according to claim 1 and claim 6 respectively. Searby and Liu et al. do not *explicitly* disclose the limitations of detection of the “artifacts” associated with preview images.

However, Baggs et al. disclose the limitations of detecting the presence of visual artifacts (*See Baggs et al., i.e. Claims 1, 23 and “Abstract”*).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have modified the teachings of Searby and Liu et al. to include the limitations of detection of the “artifacts” associated with preview images taught by Baggs et al. It would have been obvious to one of ordinary skill in the art at the time of invention to have the teachings of Searby and Liu et al. by the teachings of Baggs et al. to include the limitations of detection of the “artifacts” associated with preview images taught by Baggs et al., *for improving the quality of a digital image of a document (See Baggs et al. i.e. Paragraph [0003])*.

### ***Conclusion***

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacky X. Zheng whose telephone number is (571) 270-1122. The examiner can *normally* be reached on Monday-Friday, 7:30 a.m.-5p.m., Alt. Friday Off.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jacky X. Zheng/  
Examiner, Art Unit 2625  
February 27, 2009

/Twyler L. Haskins/  
Supervisory Patent Examiner, Art Unit 2625